

**COMMUNICATION FACTORS AFFECTING LANGUAGE LEARNING AMONG  
HEARING-IMPAIRED  
PRE-SCHOOLERS IN KUJA SCHOOL FOR THE DEAF IN RONGO DISTRICT,  
MIGORI COUNTY.**

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THE AWARD OF MASTERS DEGREE IN (EARLY CHILDHOOD EDUCATION)  
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## DECLARATION

This research report is my original work and has not been presented for a degree in any other university



Elkanah Mochache Gichana

This research report will be submitted for examination with our approval as University Supervisors



Dr Helten Inyega

## **DEDICATION**

I dedicate this research report to my beloved wife Everlin Chelangat my sons Joshua Mochache, Titus Omanga and Hyna Bwan for having tirelessly encouraged me to pursue this course and assisting me spiritually, emotionally, psychologically and financially in my studies.

## ACKNOWLEDGEMENTS

I would like to thank the head teacher of Kuja school for the deaf in Rongo District, migori county who gave me permission to carry out the research in the pre-school.

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## ABSTRACT

The purpose of the study was to establish communication factors affecting language learning activities among the hearing impaired pre-schoolers in kuja school for the deaf in Rongo District, Migori county. The objectives of the study was to investigate the influence of teachers academic and professional qualifications on language learning. To establish the influence of teachers years of teaching experience on language learning among pre-school children with hearing impairment. The study was also to identify and determine the influence of teacher communication mode(s) on language learning to the hearing impaired pre-schoolers in kuja school for eth deaf.

The study also looked into communication mode preferences of the teacher and the pre-schoolers in kuja pre-unit class and how they have an effect during teaching and learning activities.

Literature review focused at the receptive and expressive communication problems of the hearing impaired children. Effects of hearing loss on language, social, development, educational mode(s) to the hearing impaired children. The communication modes reviewed were KSL, finger spelling, total communication and auditory oral approach.

The researcher adopted descriptive design of a case study that enabled him to make a detailed examination of communication factors affecting language learning among hearing impaired pre-schoolers in kuja school for the deaf in Rongo District, Migori County.

The researcher purposively selected kuja school for the deaf as they cater for the hearing impaired. The sample of the study were selected from a target population of two hundred and fifteen. The researcher sampled one female pre-unit teacher, the head teacher, the pre-unit class of six boys and five girls all with hearing impairment.

The instruments used to collect data were questionnaire for the headteacher, plus a questionnaire for the pre-unit teacher. The observation schedule was also used and a documentary analysis.

The findings of the study was that the pre-unit teacher had not trained in handling the hearing impaired. The communication mode preference for the teacher was total communication while pre-shcoolers preferred KSL.

Due to these modes of communication being used interchangeably and haphazardly, findings show that problems arose in understanding instructions.

Finally the researcher made necessary recommendations and suggested topics for further research. The recommendations and suggested areas are summarized in chapter five of the study.

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## ABBREVIATIONS AND ACRONYMS

ASL	-	American Sign Language
BSL	-	British Sign language
EARS	-	Educational Assessment and Resource Services
EFA	-	Education for All
FPE	-	Free primary Education
KSL	-	Kenya Sign Language
LSEN	-	Learners with Special Education Needs
MCF	-	Manually Coded English
SEE1	-	Seeing Essential English
TC	-	Total Communication
UPE	-	Universal Primary Education

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Problem

The importance of giving children pre-school education early is that it prepares them for primary education. Once children are exposed to education early, it enables teachers and parents to discover children's potential, disabilities (if any) at an early age and offer early interventions based on the nature of the disability. When children's problems are identified early parents and teachers are psychologically prepared to understand children's capabilities. This enables teachers and parents to set realistic goals and expectations concerning their children's achievement.

The education pre-schoolers get is the foundation of the next level of education they will meet at primary, secondary and university level. The elementary concepts taught at pre-schools acts as an anchor on where the next level of education is to be built. Early years of children's growth entails development on the physical, psychological, social, moral, cognitive and language aspects. All the aspects of development appear to occur in a spiral form. The earlier children are taken to school, the better placed they are to learn, from simple to complex, all educational concepts without much difficulty.

Kuja School for the Deaf in Rongo District, Migori County, admits pre-schoolers of different language and cultural backgrounds. Some of them come from neighbouring countries such as Tanzania and Uganda as well as from other parts of Kenya including Gusii, Kuria and Luo Lands. One immediate challenge that teachers are likely to face is that linked to the linguistic and cultural diversity of the children in the school. Implementation of the language policy where the language of instruction is concerned becomes an additional challenge and can be a source of communication problems which, inadvertently, may affect the teaching and

learning process. Added to this mix can be the additional challenge of hearing impairment. Hearing impairments have a wide range of causes; some people have pre-lingual deafness (meaning they became deaf before they had acquired language), while others have post-lingual deafness (where one becomes deaf after they have acquired language skills). Thus some people are born deaf while others lose their hearing gradually or suddenly after they have acquired it.

The debate over the best way to teach a child with a hearing loss to communicate has raged since the 1500s (Winfield, 1987). Although this debate continues today, there is a growing number of individuals who recognize that no one system of communication is right for all children. This may depend, in part, on age of onset of deafness or intervention period or degree of hearing during the developmental years. A child with a hearing impairment often has other areas of development affected.

The demand for educating learners with special educational needs (LSEN) at all levels in Kenya is increasing. This is because of the government's commitment to the universal primary education (UPE) since 2003. According to Early Childhood Development Service Standard Guidelines for Kenya (2006), the establishment of educational assessment and resource services (EARS) has also increased public awareness on the need for educating children with special needs. The year 1981 was declared the Year of the Disabled by the United Nations organization and up to now (2011) very minimal research has been done on the hearing impaired.

The general overview in assessing areas that have been covered in Early Childhood Education research is indicative of the fact that very little research work has been done in the area of hearing impaired in Kenya. The declaration of free Primary Education in the year 2003, the need for Education for All (EFA) (1990) and the Enactment of the Children's Act in the year 2001 (Republic of Kenya, 2001) ascribed to and advocated for access to education by everybody.

More recently, there is an increasing number of pre-schoolers enrolled in pre-schools. Through the mainstreaming policy of average children, children with hearing impairment have been enrolled as well.

The exact number of people with hearing impairment in Kenya is not known. However, Ndurumo (1993) made an estimate of the hearing impaired in Kenya to be 110,370 using the 10% of the general population – a percentage provided by the United Nations as the minimum estimate of the hearing impaired. According to Ndurumo of 110,370 people with hearing-impairment in Kenya, 27,390 of them are school-age children aged between four and fifteen years of age. The prevalence of hearing disability in Kenya is thus estimated at 0.6 percent of the population. The Ministry of Education, Science and Technology (MOEST, 2003) reports that there is a total of 5,241 school-going children with hearing impairment in special schools and integrated units countrywide. This is 19.4 percent of the total population of school-going pre-schoolers with special needs in Kenya.

According to Brown (1973) and Bruner (1983), communication is the ability to send and receive messages. It greatly involves the art of speaking, listening, using gestures and body language, facial expression, as well as writing and drawing. There are many communication factors that can influence the ability to effectively interact and convey messages. A child with hearing-impairment who is not exposed to language at an early age can develop major communication problems.

The key issue with hearing-impairment often concerns communication, hence the recommendation that the child should have exposure to it early. The language of parents further complicates the issue. If parents are hearing, it is not easy for them to learn sign language quickly enough to provide the communicative environment necessary for language development.

of the child with hearing impairment. If parents choose an oralistic approach, they may find out too late that the child does not have the capacity to develop oral language skills and has been deprived of language of whatever form (Vernon, 1976).

The pre-school teachers who are trained to handle children with hearing impairment do play a great role in fostering the early language of a child, especially in mediating the depravity in language that may have been experienced at home. Communication modes are foundational in the teaching and learning process of pre-schoolers with hearing impairment hence the focus of the present study using data on learning language

### **1.2 Statement of the Problem**

In the current education system, and with regard to training of preschool teachers, there is no ECD college that trains pre-school teachers on handling children with special needs- including those with hearing impairment. On the other hand, there exist several schools for the deaf that handle children right from preschool, secondary and tertiary levels. The problem of this study is that there is a dearth of relevant literature that documents instructional approaches pre-school teachers use in educating pre-school children with hearing impairment, in the absence of professional training, and the effectiveness of such approaches. Fewer researches have investigated specifically effectiveness of teachers' communication modes, hence the focus of the present study to investigate and tease out communication factors that affect language learning among children with hearing impairment in Migori County

### **1.3 The Purpose of the Study**

The purpose of the study was to establish communication factors influencing language learning among pre-school children with hearing impairment in Kuja School for the Deaf in Rongo District, Migori County



#### **1.4 Objectives of the Study**

The present study was guided by the following objectives

1. To investigate the influence of teachers' academic and professional qualifications on language learning among pre-school children with hearing impairment in Kuja School for the Deaf in Rongo District
2. To establish the influence of teachers' years of teaching experience on language learning among pre-school children with hearing impairment in Kuja School for the Deaf in Rongo District
3. To determine the influence of teacher communication mode(s) on language learning among pre-school children with hearing impairment in Kuja School for the Deaf in Rongo District

#### **1.5 Research Questions**

The research study was guided by the following questions.

1. What is the influence of teachers' academic and professional qualifications on language learning among pre-school children with hearing impairment in Kuja School for the Deaf in Rongo District.
2. What is the influence of teachers' years of teaching experience on language learning among pre-school children with hearing impairment in Kuja School for the Deaf in Rongo District
3. What is the influence of teacher communication mode(s) on language learning among pre-school children with hearing impairment in Kuja School for the Deaf in Rongo District

## **1.6 Significance of the Study**

The study findings was not only to increase awareness among pre-school teachers on the need to find appropriate modes of communication to use with children with hearing impairment, but also to catalyze teacher's actions in devising captivating modes of communication with the potential to enhance language learning among children with hearing impairment Children with hearing impairment will in turn benefit from novel methods aimed at improving their learning, especially in language. It is hoped also that once a teacher has been sensitized on novel communication approaches, they will use them in teaching all curricular and co-curricular subjects. That way, the findings of this study will have spill-over effects to other subjects. In other words, it is anticipated that pre-school teachers of children with hearing impairment will improve practice and decision making where modes of communication are concerned. The Ministry of Education (MoE), Kenya Institute of Education (KIE) and National Centre for Early Childhood Education (NACECE) may benefit by using study findings to design special education courses for pre-primary school teachers to facilitate language learning. The study may help parents and any and all interested in the education of children with special needs, and specifically those with hearing impairment on effective communication modes. Last but not least, study findings will have both theoretical and practical implications for the future of hearing-impaired education in Kenya and will also form a base on which other researchers will develop their studies.

### **1.7 Limitations of the Study**

The study employed a case-study research approach by focusing on one institution – i.e., Kuja School for the Deaf and specifically, the pre-school section. This obviously, minimized the likelihood of study findings being generalized. However, important implications can be drawn from this study to research locales with similar characteristics.

Another constraint was the use of questionnaire to collect information about the study. This is because the tool may not collect in-depth and rich data. However, questionnaire findings were triangulated with findings derived from other instruments such as the documentary analysis and classroom observation schedule.

### **1.8 Delimitations of the Study**

The present study was delimited to Kuja School for the Deaf which is in Rongo District, Migori County. Specifically, it was delimited to the head teacher of the school, the pre-unit class and the teachers of that class. In addition, the study was delimited to exploring the influence of teacher communication modes on language learning by pre-school children with hearing impairment. The forgoing reasons have been justified by Singleton (1993) that the ideal research setting is one that is related to the researcher's interest.

### **1.9 Assumption of the Study**

This study was based on the following assumptions:

All participants will be willing to participate in the study and give honest responses to questions asked. Pre-school teachers in Kuja School for the Deaf do employ several modes of communication. The study also assumes that pre-school teachers may not have sufficient training to handle children with hearing impairment. The study also assumes that when there is no proper communication, the deaf children may not learn as the normal children in the normal schools.

## **1.10 Definition of Key Terms**

**Communication:** Is the process of sharing ideas, information and messages with others in a particular time and place (*Encarta, 2004*). It consists of language verbal and non-verbal.

**Communication Factors:** Is that which can influence people's ability to effectively interact and convey messages

**Communication Modes:** Are the means and ways of conveying messages.

**Deafness:** Is defined as a hearing - impaired that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification which adversely affects educational performance (*William and Michael 1988*)

**Hard of hearing-** Means a hearing loss, whether permanent or fluctuating, that adversely affects a child's educational performance but which allows the child access to some degree of communication with or without amplification (*Smith et al. 2001*).

**Hearing impairment-**Is a general term used to describe any level of hearing loss, ranging from mild to profound, whether permanent or fluctuating that adversely affects a child's educational performance (*IDEA, 1990*)

**Learning** – Is a continuous acquisition of new skills, values, knowledge and attitudes which foster permanent positive behaviour change in a person (*Encarta 2004*)

**Language Learning:** It is the acquisition, of modes of communication in a formal way

**Mainstreaming** – It is the inclusive of the average children in the same class with those who have disabilities.

**Manually Coded English** - refers to manual signs of language that correspond to English words that use the same grammatical structure as spoken English (*Quigley and Paul, 1984*).

**Pre-school-** It is the first level of formal learning institution for young children aged between 2-6 years old

**Sign Language** – Is a system of making signs for letters, words and groups of words using fingered signs and bodily gestures (*Encarta, 2004*).

**Teaching** Is a systematic way of presenting facts, ideas, skills and techniques to students (*Encarta, 2004*).

**Total Communication** – refers to a philosophy of using the system most needed by the child at any given time. TC usually involves simultaneous use of speech and sign and is the most commonly used form of instruction (Schildroth and Hlotto, 1994).

**Zone** - is the smallest educational administrative unit area with cluster schools in a region under a division. It is run by the zonal quality assurance and standard officer

### **1.11 Organization of the Study**

The research report is comprised of five chapters. Chapter one consists of the background to the problem, purpose of the study, objectives, research questions, significance of the study, basic assumptions, definitions of terms and organization of the study. Chapter two comprises literature review and theoretical and conceptual frameworks. Chapter three deals with research methodology, covering research design, sampling procedures, research instruments and their validity and reliability, procedures of data collection and methods of data analysis. Chapter four comprises data analysis and interpretation of findings. Chapter five includes summary, conclusion and recommendations of the study.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

In this chapter, findings of other researchers on both receptive and expressive communication problems experienced by teachers and deaf children during teaching and learning activities were reviewed. The review also focused on the effects of hearing loss on communication in terms of language, social, educational and psychological and intellectual aspects.

#### 2.1 Receptive and Expressive Communication Problems of the Deaf Children

Communication is a two-way process, that is, it is both receptive and expressive. Expressive and receptive communication is the art and skill of speaking and listening. These two skills depend, to a great extent, on auditory acuity (Brown, 1973 and Bruner, 1983). These skills have to be developed and nurtured in children with hearing impairment. Educators have shown some concern throughout the field of special education of communication among children with hearing impairment (Lewis, 1968). One of the tasks in the education of children with hearing impairment is to help them to be in communication with as wide a range of other people as is possible. Communication needs, need not be linguistic as this means that the patterns of communication used by people with hearing impairment (e.g., gestures, conventional signing, finger spelling and speech reading and writing) should consider how far each of these is linguistic (Lewis, 1968).

Previous research shows that hearing has a strong relation to speech and language development, communication and learning. Despite this, pre-schoolers with listening difficulties due to hearing loss or auditory processing continue to be under-identified and under-served population. America Speech- Hearing Association (ASHA, 1997) findings, noted four major ways in which hearing loss affects the pre-schooler: 1) Hearing loss causes delay in the development of receptive and expressive communication skills (speech and language); 2) The language deficit causes learning problems that result in reduced academic performance; 3) Communication difficulties often lead to social isolation and poor self concept, and 4) It may have an impact on vocational choice.

According to research findings, pre-schoolers with hearing loss are slow in developing vocabulary, leading to a communication problem. Children with hearing loss learn concrete words (e.g. cat, jump etc) more easily than abstract words (e.g. before, equal to, etc). They also have difficulty with articles 'the', 'a' and 'an'. The gap between the vocabulary of children with normal hearing and that of those with hearing loss widens with age. Children with hearing loss do not catch up without intervention; such children have difficulty understanding words with multiple meanings, during teaching and learning activities. For example, the word "bank" can mean the edge of a stream or a place where money is put (ASHA, 1997).

Studies also show that children with hearing loss comprehend and produce shorter and simpler sentences than their counterparts without hearing impairment. They have difficulty understanding and writing complex sentences such as those with relative clauses. For example, "The teacher whom I have for maths was sick today." They may experience difficulties with sentences with the passive voice. For example, "The ball was thrown by Titus." In addition, children with hearing loss often connect word endings such as "s" or "ed." This leads to

misunderstandings, non agreement of subject and verb, and passives. They often connect quiet speech sounds such as "s" "sh" "f" and "k" and therefore do not include them in their speech, thus speech may be difficult to understand. They may have a pitch that is too high or too low and may sound like they are mumbling because of poor stress, poor inflection or poor rate of speaking leading to poor communication skills (ASHA, 1997).

Research on communication problems has shown that structure and vocabulary of language also influences the social and ethical behavior of children with hearing loss. The more severe the hearing loss the more the language of children with hearing impairment is likely to show omission of articles, pronouns, word endings, adjectives and adverbs in sentences. Sentences structure and verb tenses are frequently incorrect. The language of children with hearing impairment tends to include a higher proportion of nouns and words which have an obvious object or action relationship. Adjectives and qualitative, finer language shades of meaning are used infrequently. Distortions of language adversely affect interaction and the social and ethical behavior of the child with hearing impairment (Somerset Education Authority [SEA], 1981).

Further findings show the problem that hearing loss imposes on children with hearing impairment. This can be seen in the difficulty that such children have in following a sequence of instructions even though s/he may understand the language used. For example, instructing the child to do several assignments during teaching and learning process such as: Finish your work, put your book on my table, clean the board, put your sweater on and go outside. Because of the problem in sequencing and remembering or understanding verbal or manual instructions, this may make it a communication problem (SEA, 1981).



## 2.2 Communication Problems of Pre-School Deaf Children in Teaching and Learning

Research has shown that individuals who are deaf cannot process linguistic information without a hearing aid. Individuals who are hard of hearing have a residual hearing to use linguistic information with the use of hearing aid. The age of onset and the severity of the hearing loss affect individual's ability to use language. When a child has a hearing loss during the developmental years, all areas of development can be affected significantly. A hearing loss limits ease of acquisition of communication system, which further influences development of interactions with others, the ability to make sense out of the world and ease of acquiring academic skills during the teaching and learning process.

Studies have shown that the greatest area of difficulty for the deaf is communication, which is more pronounced in the area of their education (Alade and Abosi, 1991). Alade and Abosi's research focused on Vernon's (1970) findings that identified three major aspects of communication problem resulting from hearing loss. 1) Being unable to hear speech. The deaf person depends on lip-reading (speech reading) to understand what others say. Unfortunately, lip-reading is a very unreliable and complex method of understanding speech as over half of the sounds in a language are not visible on the lips or if visible they are identical in appearance to other sounds. Additional complicating factors such as moustache, protruding bad lighting, head movement, contribute to the fact that the deaf person, if forced to depend solely upon lip-reading will generally not understand much of what is said; 2) Not being able to hear how he or she articulates. The deaf individual cannot accurately monitor his or her pronunciation, pitch or volume. The outcome is unintelligible speech, and 3) The pre-lingually deaf generally starts school with little or no vocabulary.

Vision is very important to a child with hearing impairment (Silverman, 1970). S/he can depend on this sense as a substitute for hearing loss. A child with hearing impairment will usually be aware of conversation by observing the movement of the lips, even though s/he does not understand what is being said thus making vision important for all modes of communication. Kirk (1972) highlights the importance of speech-reading. He points out that although people use auditory sense to understand the spoken word, most hear well if they look directly at the speaker's face as certain facial expression and movements add meaning to what the speaker says. Speech-reading lessons are given mostly to the hard of hearing pre-schoolers to sharpen their understanding of what is said to them. By directing their attention to certain clues in lip and facial movement, they learn to fill in from visual clues the sounds they do not hear and words which are indistinct.

Research on pre-lingual profoundly deaf persons and communication has shown that speech-reading is not an adequate form of communication. It is of some use when the deaf person knows the context and conversation is simple. When communication becomes more complex, lip-reading tends to be inadequate. A failure by hearing people to realize this fact has created severe communication problem for deaf persons (Vernon and Andrews, 1990). Individuals vary greatly in their aptitude for speech reading and factors such as visual acuity, age, gender, and personality structure play a role (Berger, 1972). Speech-reading is of greatest value to those who have enough residual hearing to hear and understand some speech sounds (O'Neill and Oyer, 1981). In fact, when an individual can supplement speech reading with significant amounts of residual hearing, the total amount of understanding increases dramatically during teaching and learning activities (Berger, 1972). However, when auditory losses are profound, residual hearing is relatively useless as a supplement to speech-reading (Frisina,

1976) Studies have also shown that the group that finds speech reading the most frustrating and disappointing is those with sudden late onset of deafness and those who become deaf gradually, starting in their later years (post-lingual deafness) making communication a problem for them, the visual, cognitive, age and other changes, makes it extremely difficult to learn speech reading (Kaplan 1985 Sayre, 1980).

Findings on auditory training have also been reviewed and cite benefits in which the hearing-impaired persons get regardless of the time of onset of hearing impairment. Because hearing aids do not restore hearing to normal, the pre-schooler with hearing impairment who uses amplification needs explicit training in perceiving, discriminating and identifying both environment and speech sounds through their hearing aids. Auditory training improves receptive skills of the deaf and hard of hearing persons. Today, hearing aids help many pre-schoolers with hearing impairment to understand speech and to function adequately in an aural environment. Difficulties arise when hearing aids are perceived as panaceas for deafness in alleviating communication problems (Baker, 1994).

Research findings by Dourlag (1983) show that many persons with hearing impairment get no benefit from amplification; others only hear loud noise and understand no speech. Some general qualifications need to be made regarding hearing aids and communication. First, studies have shown that hearing aids do not help much for a person with sensor-neural deafness as they only make sounds louder, but not necessarily clearer. As a result, hearing aids for understanding language (SFA, 1981) hearing aids may also amplify background noise disproportionately. There is also a potential danger from amplification especially with infants and young children if the level of sound is increased too much it may damage the auditory mechanisms (Macrae, 1968, Madell, 1978). Some pre-schoolers wear hearing aids not because the device enables them to

hear, but they alert others to their hearing problem, which make them speak more distinctly. By contrast, there are those who could benefit from hearing aids, but refuse to wear them because of shame, vanity, ignorance, discomfort or general social sensitivity, which adds to their communication problems.

### **2.3 Effects of Hearing Loss on Language, Social and Psychological Development and Education**

A child with hearing impairment may have distorted language. This may adversely affect his or her interaction, social and ethical behavior (SEA, 1981). Research on pre-schoolers with hearing impairment indicates that their ability to acquire language through reading during the teaching and learning process causes the nature of reading to become a significantly more difficult task than reading for the hearing and linguistically adept pre-schoolers (SEA, 1981).

From infancy, the normally hearing child learns to vary pitch, intensity and length of his or her vocalizations. Even before speech is established a hearing infant varies his or her vocalizations in conversations. On the basis of language already established in conjunction with auditory, visual and motor skills, reading skills develop. Verbal and written skills develop at a later stage. Verbal and written language is used in expressive form to achieve most human needs. The hearing-impaired child's vocal and language skills result in limited or no vocalization in infancy and childhood. When a child does not use his or her voice, and language is slow to develop, there is danger that those involved with the child may talk to him or her less frequently and will decrease interaction with him or her, causing a communication barrier (SEA, 1981).

A child who hears low frequencies well but is insensitive to middle and high pitch tones faces a different communication problem (Moore, 1996). It is likely to take years before the child's deficiency is discovered, since s/he can hear low frequencies, s/he reacts to many of the sounds in his or her world. People seeing his or her response, reason that his or her hearing is normal and fail to realize how distorted and imperfect are his or her impressions of sounds. The child misses the acoustic elements, which give speech its distinctive character and the outcome of this is slow development on certain use of language. The child incorporates his or her own speech only the imperfect distinction, which s/he perceives in the speech of others. The result is a mushy and slurred pattern of talking that is unintelligible, thus affecting communication (Moore, 1996)

Studies have also shown that any substantial loss of hearing which exists at birth or soon after birth, will hinder both language and speech habits because the hearing loss reduces sharply the number of listening experiences that the child has and thus slows up the process of learning to talk. Hearing losses of certain type make it impossible for the child to distinguish some of the elements of speech. Speech defects may arise as a result of hearing loss that begins after childhood. If the ear can no longer serve as a monitor when one talks, slow degeneration of speech results and the sharpness and precision disintegrate, while the melodies of speech become monotonous. Intonation loses their life and the quality of the voice becomes rigid. Finally, control over the loudness of the voice suffers, causing a communication problem (Moore, 1996)

Davis and Silverman (1970) cite loudness of voice as another aspect of speech that poses difficulty to the hearing-impaired during the teaching and learning process. Hearing loss disturbs the ability to adjust the level of one's voice to the needs of the moment because the child will

miss much of the background noise thus has an imperfect gauge of the requirements of the moment. The speaker with a hearing loss may receive a false impression of the loudness of his or her own voice. When hearing loss is sensori-neural type, his or her voice sounds faint and has a tendency to talk loudly to a level which seems of normal loudness to him or her. The reverse effect occurs when the hearing loss is of conductive type. Here the speaker's voice is transmitted by bone conduction and seems much stronger than other sounds that s/he often softens the voice until the balance between his or her voice and the background noise or more to his or her satisfaction and as a consequences, s/he is hard to understand during a conversation (Davis Silverman, 1970).

Writing is another avenue of expressive communication. Unfortunately, the consequence of early profound hearing loss is that most deaf and hard of hearing pre-schoolers whose auditory loss was pre-lingual lack fluency in language making communication a problem. Instead of the child hearing language in his or her natural environment, s/he sees it for moments on the lips, but not knowing language, s/he understands little if any of these mouth movements. The result is that few pre-lingual deaf students master language and many are unable to use it well enough to read and write effectively (Jensema and Torybus, 1978; Quigley and Paul, 1984). The problem is pervasive among deaf preschoolers and their poor language is often misconstrued as a reflection of low intelligence (Vernon, 1976).

## **2.4. Communication Modes for Children with Hearing Impairment**

There are many communication modes that can be used with children with hearing impairment. There is persistent controversy regarding the best methods of teaching pre-schoolers with hearing impairments. The first challenge a teacher faces is the choice of mode of communication to use in the teaching and learning process. This is due to, in part, the wide range of pre-schoolers, each with their own abilities and unique needs. Along with this is the severity of each pre-schooler's hearing loss. Some suffer from only slight amounts of hearing loss and can, therefore, have better verbal communication skills, while some are completely deaf and have no way to communicate except through sign language (Davis and Silverman, 1970)

Previous research has outlined some communication approaches, which can be used for effective teaching and learning activities in schools for hearing-impaired in Kenya. In the section below the researcher will discuss the relative effectiveness of each in the teaching and learning process

### **2.4.1 Kenya Sign Language**

Kenya Sign Language (KSL) is manual communication (primarily hand and arm shapes, positions and movement) in the form of signs used as a language with a grammatical structure different from the structures of spoken languages. This sign language is the accepted language for the deaf in Kenya, just as America Sign Language (ASL) is for deaf persons in the United States of America and Canada, and British Sign Language (BSL) is for deaf persons in Britain. There is no universal sign language. Signing systems differ from one country to another. In each sign language there is no use of sentences structure, making it difficult to have proper grammar construction (Kluwin, 1981).

The deaf community in Kenya developed KSL. It is a visual gesture channel and allows visual reception of complex communication. KSL is a complete language with its own vocabulary and complex syntactic, semantic and pragmatic structures that are radically different from those of English or any other auditory language. It does not have a widely utilized written form. It is the native language of deaf children whose parents are deaf. These children learn KSL in a fashion remarkably similar to the language learning of normal hearing children. Many educators of the deaf (e.g., Madell, 1978) believe that KSL is not suitable as a teaching language because it is not English and is, therefore, not transferable to speaking, reading and writing skills in English.

In reality, however, the benefits of sign language outlined by Moores (1996), equally apply to KSL. It is a fast means of communication if both the user and receiver are proficient. It can be read from a distance thus it can be used in churches, professional meetings and courts. It facilitates social interaction by deaf persons, and lessens the eyestrain involved in reading endless finger spelling.

There is very little research done on Kenya Sign Language (KSL). The available research study has based its findings on the use of KSL in teaching and learning activities. The main limitation with KSL is that it is not grammatical; hence knowledge and use of it does not improve English usage. Signs are limited in number, compared with the vast vocabulary of the English language. Signs are known and used by a small minority of people.



with a second language learning approach. As with any language, the fluency of the child will depend on the fluency of the language models in his or her environment. When fluent and complete models are consistently available, English can be learned in a normal manner. This is a critical point for MCE systems, since English literacy has been and remains very important and very difficult for many individuals who are deaf (Caustad, 1986).

Because MCE systems do differ from KSL in grammar and in the use of English markers, some deaf adults do not like them. They feel it is an attempt to hearing persons to impose hearing standards on children who are deaf. In addition, because speech is faster than signs, an individual must be committed to presenting complete English in signs and to make the effort to learn and become fluent (Bornstein, 1990). Persons who are not wholly committed may end up signing only part of their spoken message, presenting incomplete English that does not fit sign language syntax either.

### **2.4.3 Total Communication Approach**

Total Communication approach (TC), is the title of a philosophy of communication, not a method (Scouten, 1984). Total communication may involve one or several modes of communication (manual, oral, auditory and written), depending on the particular needs of the pre-schooler. The original expectation of TC was for teachers to use the communication method (s) most appropriate for a particular pre-schooler at a particular stage of development. Therefore, there would be situations when spoken communication might be appropriate, other situations where signing might be appropriate, others that would call for written communication, and still others where simultaneous communication might work best (Solit, et al, 1992). Today, although the debate seems to be between TC programs and bilingual programs, simultaneous

communication is the most common form of communication used in educational settings for deaf pre-schoolers (Kaplan, 1996).

Families and educators may use TC since more than 90 percent of parents of children who are deaf have hearing themselves (Moores, 1996; Rawlings and Jensen, 1977). Many believe that TC is a philosophy that will allow flexibility without eliminating any of the options. By using a total approach of speaking and signing all members of the family, those who are deaf as well as those who are hearing, have continuous access to the communication occurring in their environment (Baker, 1994). Teachers may choose to provide TC options in their classrooms. Those who choose this approach have the responsibility and obligation of acquiring the skills necessary to meet all of the pre-schoolers' communication needs.

Research studies have repeatedly demonstrated the beneficial effects of total communication in all areas of deaf pre-schoolers development, whether psychosocial, linguistic, or academic (Vernon and Andrews, 1990). If the effectiveness of communication is more important than the form it takes (Kaplan, 1996), then TC is beneficial because it allows the pre-schooler to use form that is best for him or her in any given situation.

One limitation of TC is that while the theory may be sound (Encarta, 2004) it may not be put into practice accurately enough in some situations. Many pre-schoolers who are deaf are immersed in a form of simultaneous communication that does not match their level of linguistic readiness or ability. The very nature of the two modes (Spoken and visual) may cause signers or speakers to alter their messages to accommodate one or the other modes causing a compromise between the two methods (Wilcox, 1989).

#### 2.4.4 Auditory-Oral Approach

The auditory oral approach is based on the fundamental premise that acquiring competence in spoken language (Furth, 1966) both receptively and expressively, is a realistic goal for children who are deaf or hard of hearing. Further, this ability is best developed in an environment in which spoken communication is used exclusively, which includes both the homes and classroom (Adams, et al, 1990, Stone, 1988). Teaching pre-schoolers to use whatever hearing they have to further the acquisition of spoken language is basic to the auditory-oral approach. Four levels of listening skills are detection, discrimination, identification and comprehension because the purpose of developing listening skills is to further spoken language competence. Speech is the primary stimulus used in listening activities (Ling and Ling 1980). Given current amplification technology (i.e., powerful and flexible hearing aids, FM systems and cochlear implants), it is reasonable and realistic to expect most children with hearing loss to hear at conversational levels. This makes an auditory oral education a possibility for the large majority of such children given appropriate support. However, the crucial role parents play in such an education makes it imperative that they make a conscious and informed decision about the communication approach that best fits their situations.

The primary benefit is being able to communicate directly with a wide variety of individuals (Kirk, 1972). This ability brings with it options in terms of education, vocation and social life. Use of this method enables the hearing-impaired child learn language by putting together what they see on the speaker's lips and what they hear through their residual hearing with the help of a hearing aid (Moore, 1996). As with every approach to educating children who are deaf or hard of hearing, not all children will be successful. Unanswered questions remain about auditory functioning (even some hearing children cannot use their hearing well), language

processing (some children may also have additional language disorders), and learning styles (some learning styles inhibit the attention and vigilance needed to develop orally) (Kyle, 1987). Fortunately, the availability of effective amplification removes severity of loss as a limitation of auditory oral education.

## 2.5 Theoretical Framework

This research was informed by the social cognitive learning theory. Underpinning this theory is the fact that cognitive development is acquired when there is social interaction facilitated by language (Dworetzky, 1996). During early childhood, there is rapid growth in language. This enhances the child's ability to participate in social communication. Children start by talking to themselves, through inner speech, just the same way they talk to others (Kaplan, 1996). This greatly enhances cognitive development. Vygotsky (1962) posits that children speak to themselves for self-guidance and direction. Vygotsky views language as the foundation of all higher cognitive process like planning, memory, attention, problem solving and even self-evaluation (Karmiloff, 1999).

The social cognition learning theory asserts that culture is the prime determinant of individual development. Humans are the only species to have created cultures and every child develops in the context of a culture. Therefore, a child's learning development is affected in ways large and small by the culture which includes the culture and family environment in which s/he raised. Culture makes two sorts of contributions to a child's intellectual development. First through culture children acquire much of the content of their thinking, that is, their knowledge (William and Michael, 1988). Second, the surrounding culture provides a child with the process

or means of their thinking, Vygotskians call this the tools of intellectual adaptation. According to the cognition learning model, culture teaches children both what to think and how to think.

Cognitive development results from dialectical process whereby a child learns through problem solving experiences shared with someone else, usually a parent or teacher but sometimes a sibling or peer. Initially, the person interacting with the child assumes most of the responsibility for guiding the problem solving, but gradually this responsibility transfers to the child. Language is a primary form of interaction through which adults transmit to the child the rich body of knowledge that exists in the culture. As learning progresses, the child's own language comes to serve as her primary tool of intellectual adaptation (Smith et al, 2001) eventually children can use internal language to direct their own behavior thus, internalizing a rich body of knowledge and tools of thought that first exist outside the child (Janekin, 1990). This happens primarily through language (Idea, 1990). A difference exists between what a child can do on her own and what the child can do with help. Vygotskians call this the zone of proximal development. Since much of what a child learns comes from the culture around her and much of a child's problem solving is mediated through an adult's help, it is wrong to focus on a child in isolation. Such focus does not reveal the process by which children acquire new skills (Encarta, 2004). Interaction with surrounding culture and social agents, such as parents and more competent peers contribute significantly to a child's intellectual development. Since children learn much through interaction, curricula should be designed to emphasize interaction between learners and learning tasks (Encarta, 2004).

The social cognition learning theory has important implications to teaching and learning as far as communication development of the hearing impaired child is concerned (Yoshnago, Itano et al, 1998). This means that children's first experience of literacy should be in their first

language. The mother tongue of the children with hearing impairment in Kenya is Kenya Sign Language (KSL). This means also that this should be actively used in their schools. When a child's first school experiences are in a second language, the school should employ and support teachers who speak the child/ children's first language. Teachers who do not speak the child's language should be encouraged to learn as much as possible of the language and to use it in the classroom (Workomir, 1992). Instruction with appropriate adult help, children can often perform tasks that they are incapable of completing on their own. With this in mind, scaffolding (where the adult continually adjusts the level of his or her help in response to the child's level of performance) is an effective form of teaching. Scaffolding not only produces immediate results, but also instills the skills necessary for independent problem solving in the future (Schildroth and Hotto, 1994).

Assessment methods must take into account the zone of proximal development. What children can do on their own is their level of actual development and what they can do with help, is their level of potential development. Two children might have the same level of actual development, but given the appropriate help from an adult, one might be able to solve many more problems than the other. Assessment methods must target both the level of actual development and the level of potential development (Brunner, 1964 and Vygotsky, 1962).

## 2.6 Conceptual Framework

The figure below illustrates the interrelationships between various variables that were important to the study

### Independent Variables

- Teachers' Academic and Professional Qualifications
- Teachers' Professional Experiences
- Teacher's Use of Communication Mode (s)

### Dependent Variable

- Pre-schoolers with Hearing Impairment's Language Learning

### Extraneous Variables

- Home Factors e.g., Parents' Mode (s) of Communication
- School Factors e.g., Provision of Instructional Materials and Resources
- Learner Factors e.g., Severity of Hearing Impairment

*Figure 1: Conceptual Framework of Interrelationship between Variables of the Study*

Three independent variables included in the study are: Teacher academic and professional qualification and Teachers experience teaching children with hearing impairment. The third independent variable is teacher's use of communication modes. These are three teacher factors that can influence the dependent variable: language learning. However, there are many other extraneous factors that could, singly or in combination, also affect performance in academic work. These include, home, school and learner factors. The researcher, being cognizant of extraneous variables made efforts to minimize their effect on the dependent variable through basic assumptions and delimitation of the study and through the research design and sampling procedures employed.

## 2.7 SUMMARY.

The review on what other researchers have done show that communication development of hearing impaired in language is strongly influenced by the age of onset and the severity of hearing loss. The majority of individuals with profound hearing loss do not develop intelligible speech. The lack of feedback creates a major obstacle in the production of language sounds. However the difficulty in language does not interfere with the development of fluency in KSL, which is the native language of the deaf culture in Kenya.

Communication is the greatest area of difficulty for the deaf and hard of hearing pre-schoolers. It is essential to be able to select appropriate method of communication in teaching and learning activities.



## CHAPTER THREE

### METHODOLOGY

#### 3.0 Introduction

This section discusses the research design, locale of the study, target population, sample and sampling procedures, research instruments, validity and reliability of research instruments, procedures for data collection and data analysis approaches used in the study.

#### 3.1 Research Design

The researcher adopted a case-study research design that enabled him develop a detailed and in-depth understanding of communication factors affecting language learning among pre-school children of Kuja School for the Deaf situated in Rongo District, Migori County.

#### 3.2 Target Population

A target population is the entire group a researcher is interested in; the group about which the researcher wishes to draw conclusions (Mulasa, 1988). The target population of the present study was Kuja School for the Deaf in Rongo District, Migori County. Specifically, the study targeted the head teacher, the teacher of the preschool class and preschoolers of the pre-unit class as tabulated below.

*Table 3.1: Target Population*

Sample	Male	Female	Total
Head Teacher	1	-	1
Pre-School Teachers	-	1	1
Pre-Unit Pupils	6	5	11
<b>TOTAL</b>	<b>7</b>	<b>6</b>	<b>13</b>

### **3.2.1 Sampling Procedure and Sample Size**

Purposive sampling technique was used to select Kuja School for the Deaf, the head teacher (male), the pre-unit class (six boys, five girls) and the pre-unit teacher (female). The total sample selected was thirteen

### **3.3 Research Instruments**

Data collection instruments included questionnaires, observation schedule and documentary analysis schedule

#### **3.3.1 Questionnaire**

There was a questionnaire for the pre-school teacher and another one for the head teacher of Kuja School for the Deaf. The researcher preferred the use of questionnaires as it was time saving and hence allowed the collection of data with ease.

The pre-school teachers' questionnaire had two sections. Section one was aimed at capturing background information of each teacher in terms of academic and professional qualification and experience in teaching of pre-schoolers with hearing impairment. Section two dealt with communication mode (s) used by teachers in imparting knowledge and skills to pre-schoolers with hearing impairment. An additional section solicited information on communication barriers these teachers experience in teaching children with hearing impairment.

The questionnaire for the head teacher had three sections. The first section had background information of the head teacher, that is, his academic and professional qualification and experience handling children with hearing impairment. The second section sought background information about the institution, preschoolers with hearing impairment and teacher qualifications. The last part sought information on communication problems encountered by the head teacher and pupils during school activities

### **3.3.2 Observation Schedule**

The researcher observed 25 language activities sessions using an observation schedule for a period of six weeks. There was one observation a day for the entire period. Each observation lasted 30 minutes. The observation schedule had seven components on children learning activities: Speech, Gesture, Attention, Play, Understanding, Listening, Turn-Taking and Imitation. The observation schedule enabled the researcher to gather information on learners' behavior and responses to teacher's written work and individual children's communication and interaction with others in class. The researcher also observed the children's involvement in play work, children's writing, and children's manipulation skills with various materials.

### **3.3.3 Documentary Analysis Schedule**

A documentary analysis schedule was used to analyze secondary sources of information in Kuja School for the Deaf including language texts, syllabi, schemes of work, lesson plans, pupil progress records, report cards, and pupils' exercise books for a deeper understanding of effectiveness of teacher communication modes in teaching language.

## **3.4 Validity**

Validity is concerned with establishing whether the content of the research instruments gathers the required information (Orodho, 2004). The researcher sought expert advice of his university supervisor on the area under investigation to ascertain the face validity of the items on the research instruments. The feedback provided was incorporated in the research instruments.

## **3.5 Reliability**

Reliability of research instruments focuses on the degree to which empirical indicators of a theoretical concept are stable across two or more attempts. It is assumed that responses to the test on two different occasions would be very similar because they reflect the same content of respondents (Orodho, 2004). The researcher determined the reliability of the research

instruments by pilot-testing the instruments and comparing results across various data collectors to determine inter-rater reliability measures. Specifically, the following steps were followed. The developed questionnaires, classroom schedule and documentary analysis schedule were used with a few respondents (not included in the present study) and scored. The same instruments were administered to the same group of respondents after a period of three days and scored again. A comparison between responses obtained between the first and second session was made using Pearson Product Moment correlation co-efficient otherwise known as test-retest for reliability of those research instruments.

### **3.6 Procedure for Data Collection**

The researcher applied for a research permit from the Ministry of Education (MoE). After this, the researcher booked an appointment with the specified school, through the head teacher, to visit and administer the research instruments. The researcher then visited the school and administered the questionnaire and conducted the observations in person. The questionnaires for the teachers were distributed to the respondents and collected on the same day to avoid distortion of information. The researcher conducted classroom observations for a period of 25 days or six weeks. Each language learning activity lesson lasted 30 minutes. Respondents were given instructions and assured of confidentiality after which they were given enough time to answer questions. At the same time the researcher was available to clarify any arising issue or controversy. The researcher visited the classroom severally before beginning to collect data to ensure pupils got used to him and were comfortable to learn normally, before he began data collection. Children's privacy was observed and the information gathered from all records treated confidentially.

### **3.7 Data Analysis**

The researcher cleaned and analyzed data using descriptive statistics. The results were reported using frequencies, tables, charts and graphs. These were preferred as they easily communicate the findings to many readers (Gay, 1992).

### **3.8 Summary**

The study adopted a descriptive case design which enabled the researcher make a detailed examination of communication factors affecting language learning in kuja school for the deaf. The descriptive case design has been used in preliminary study to allow the researcher gather information, summarize, present and interpret data for the purpose of clarification (orodha 2003).

## **CHAPTER FOUR**

### **RESEARCH FINDINGS**

#### **4.0 Introduction**

This chapter presents the results and discussion of the study findings. The first section has background information of the head teacher and the pre-school teacher including their ages, education and professional qualifications and years of teaching experience. This section also provides information of pre-unit pupils including nature of their hearing impairments. The second section deals with communication problems encountered by pre-schoolers, teachers and the headteacher in their daily activities within the institution. Section three presents results of communication mode(s) preferences of the teacher's and pre-unit pupils during language learning activities. Section four has the results and discussions addressing communication barriers, during language learning activities of hearing impaired pre-schoolers. Finally a summary of the results is presented in the last section.

#### **4.1 Background Information of Respondents**

Eleven (11) pre-unit children sampled for the study were between 5 and 6 years of age. Ten of them were born deaf. One of them became deaf before two years of age. All the children acquired deafness before they could acquire languages. They could be considered pre-linguals (Vernon, 1976) except the one child who could have had some language acquisition before becoming deaf. The pre-unit teacher was between 31 and 40 years of age while the head-teacher was over 50 years.

## **4.2 Influence of Teachers' Academic and Professional Qualifications on Language Learning**

The head-teacher was a trained diploma teacher in teacher education. The pre-unit teacher's highest academic level was Form Four. She was a trained certificate and diploma teacher in early childhood education. Documentary analyses of children's progress records show that pupils performed poorly in language activities over the period preceding the research study. The pre-school teacher stated that one reason for this status quo was because she had had no professional training on teaching children with hearing impairment. The two teachers did not have any specialized training to handle children with hearing impairment. This finding has important implications for the variables under study. From the outset, it appears that the teachers were ill-matched to the special and unique needs of their learners as shall be demonstrated elsewhere in this chapter. Teachers of children with special needs need to undergo specialized training to acquire competencies to handle the unique and often diverse needs of the children they meet in their classrooms. Future research could investigate the relationship between teachers' academic and professional background and performance in language tasks by children with hearing impairment using larger sample sizes.

## **4.3 Influence of Teachers' Years of Teaching on Language Learning among Pre-schoolers with Hearing Impairment**

The pre-school teacher handling the pre-unit class of Kuja School for the Deaf had a five-year teaching experience in the same school. During the teacher's first year of teaching, she handled baby class. She had then moved with that group of children to the pre-unit class.

The pre-unit teacher reported that she encountered immense difficulties in trying to communicate with the children in baby class. She attributed the difficulties she encountered to several factors including the fact that the children had come from home without having acquired any sign language. She self-reported that she spent a lot of her teaching time interacting with the pre-schoolers and "listening and watching" the children to pick up any "language they came with from home". She reported also that during life skills activities she listened and watched them during story-telling to know more about their signs and meaning.

As the adage goes, experience is the best teacher. Progressively the teacher gained her skills and knowledge on how to handle children with hearing impairment on the job! In addition, she gained more knowledge, skills and experience by referring to books for upper classes and also through discussions with fellow teachers who had the training on handling children with hearing impairment. More importantly, the teacher acquired Kenya Sign Language (KSL) through internal tutorials, workshops and seminars conducted by fellow teachers. The teacher also interacted with children in the upper classes, especially class eight pupils, who were of great help to her in learning KSL.

The head-teacher of Kuja School for the Deaf had a teaching experience between 6 – 10 years in that school. He, too, had not undergone training in special needs education. Yet he handles over 200 pupils with varying degrees of hearing impairment. Fortunately, he is assisted by a teaching staff of 15 teachers, 11 of whom have training on teaching children with hearing impairment. Without any training on how to handle pupils with hearing impairment, the head-teacher finds it difficult to communicate with these pupils forcing him to have an interpreter when giving administrative statements. He reported that he has no way of telling whether or not the messages



are distorted. Some of the times, there have been miscommunication between the administration and the school community which may be attributed to this limitation.

The head-teacher reported that he too had learned, on the job, different ways of dealing with pupils with hearing impairments. Indeed, he said that he had taken steps to ensure that all members of the teaching fraternity acquire the knowledge of KSL through conducting school internal sign language classes facilitated by some of the 11 teachers who have had training on teaching children with hearing impairment.

An important implication from the present study is that on-the-job experience can mediate the lack of training teachers need in order to handle special needs children. However, and as attested by the two participants, this information is necessary but often insufficient to help a teacher deal effectively with children with special needs. The underlying principle is that relevant training would provide additional professional development competencies to help teachers better handle children with special needs such as those of Kuja School for the Deaf.

#### Communication barriers between teachers and pre-schoolers during language learning.

From the research findings the researcher established that there is lack of proper communication in the way the hearing impaired children use sign language and the teachers understanding. The hearing impaired sign differently with different meanings that seem to deviate from the conventional Kenya sign language (KSL). The hearing impaired pre-schoolers have different signs to mean one thing. They have not known signs well.

As much as Kenya sign language is the recommended method by the ministry of education, the government has not come up with learning materials and books meant for early childhood development education for the hearing impaired.

From the documentary findings, thus learning resources charts didn't have names of pictures and signs for particular pictures. This real poses a big challenge and barrier on the teaching of the hearing impaired pre-schoolers.

The schemes of work on language activities were unsatisfactory due to lack of proper materials for preparation. The schemes of work had words and names but also didn't have sign word and names of a particular item and meaning of topics to be covered. The research findings found this to be a barrier in communication for the part of the teacher and it bears a great negative impact to hearing impaired pre-schoolers on language learning.

Lesson plans on language activities was also unsatisfactory and the pre-school teacher deduced this on lack of proper Kenya sign language materials for preparation, especially books on sound. Each sound should have own sound sign to help for preparation in reading.

Report book which the researcher found in place didn't have columns for subjects for the deaf to be recorded. Thus subjects for the deaf should be indicated. The deaf should have a special report book particularly meant for the deaf only.

Another observation made between the pre-schoolers and the teacher during language learning activities is that the 11 children (100%) didn't wear hearing aids. The pre-schoolers had not attained the required age of assessment which is normally 10 years. All the pre-schoolers are within the age bracket of (5 – 6 years). Upon attainment of the mandatory 10 years that is when they can be assessed and be ascertained to use hearing aids in-case of those found to be having the hearing residue. At the pre-school level when the teacher uses verbal communication there is bound to be communication barriers to the hearing impaired pre-schoolers.

#### 4.4. Influence of Teacher's Communication Mode(s) on Language Learning of Preschoolers with Hearing Impairment

##### 4.4.1 Pupils' Preferred Mode of Communication

There are several modes of communication being used by both pupils and teacher during language learning activities of the pre-unit class of Kuja School for the Deaf. Table 4.6 shows the preferred modes of communication

*Table 4.1: Distribution of Preferred Communication Modes*

Mode of communication	Frequency	Percent frequency	Remark
Total communication	1	9	2
Kenya sign language	8	73	1
Oral communication	1	9	2
Written communication	1	9	2
Total	11	100	

Eight out of eleven pupils with hearing impairment (73%) preferred the use of Kenya Sign Language (KSL). One pupil (9%) used total communication, another pupil (9%) preferred oral, and another preferred written. The eight pupils who were using KSL were only in the process of learning it so theirs was not the standard KSL. For instance, they had different signs for the same thing. An analysis of the written communication preferred by one of the pupils revealed that the writings were fragmentary and did not bear any semblance to conventional writing. The child who used total communication showed minimal progress with all three elements of this type of communication i.e., oral, written and KSL. His use of total communication can be described as emergent.

One challenge that arose out of the pupils' preferred modes of communication was that the pre-unit teacher did not understand the pupils' responses during language learning activities; especially where children had different signs for the same thing. The teacher stated that she

adopted a multi-pronged approach to understanding the children which included, as mentioned elsewhere, listening and watching the children for additional cues to decipher meaning.

An additional complication arose when it was the teacher's turn to issue instructions. The pre-schoolers did not always understand instructions given out during language activities. The pre-unit teacher stated that the "signs are not well known to them... especially when introducing new vocabulary ... hence children take a lot of time to understand and practice."

In short, the main problem the teacher encountered in the pre-unit class was with children signing differently. She said she encouraged the "children to interact more with children in lower classes so that they can have uniform sign language." Many pupils preferred KSL during interaction. However, sign language alone has negative impact on acquisition of proper grammar thus leading into poor academic performances during language teaching learning activities (Kluwin, 1981). Perhaps the teacher could encourage other modes of communication in addition to signing

### 1.5.2. Teachers' Preferred Modes of Communication

The table below shows the top three modes of communication the pre-school teacher preferred to use with her pupils. The modes of communication are ranked hierarchically starting with the most preferred to the least preferred.

*Table 4.2: Teacher's Preferred Mode of Communication*

Mode of Communication	Ranking
Total Communication	1
Kenya Sign Language	2
Oral & Written Communication	3

From Table 4.2 above, the most preferred mode of communication is total communication followed by Kenya Sign language and oral and written communication. The pre-

unit teacher preferred using total communication during language instruction. She said total communication encompasses verbal and non-verbal communication and gives her leeway to speak and or sign. Previous research (e.g., ) indicates that when total communication is correctly used, it helps pupils acquire correct language which enables them to perform well in academics. Total communication mode encompasses all other means to communication.

There were situations where the teacher used KSL as the second preferred mode or resorted to oral and written communication. KSL is commonly used by people with hearing impairments. It has the potential to give the pre-school child foundational skills for later learning. Moreover, it is the first language the child acquires and so using it is consistent with using the language the child brings with them to school. This way, the child acquires academic concepts easily with the method.

The pre-unit teacher used verbal and non verbal communication mode(s) to teach language to the pre-school children with hearing impairment. This approach was most helpful to one child who was partially deaf. Classroom observations showed that children who were deaf tended to take instructions when the teacher used KSL. In addition, the children were seen observing the teacher and lip reading to get what the teacher said to them.

As stated elsewhere, the teacher encounters difficulties in teaching the pre-school children with hearing impairment. Apart from attending internal sign language classes and tutorials, the teacher stated also that she had taken the initiative, in conjunction with the administration, to set rules which support use of sign language most of the time through use of activities such as "silent days".

#### 4.5. Pre-School Children's Performance in Language Activities

The researcher sought to investigate the influence of teacher factors on pre-school children's language learning. Specifically, the researcher investigated teachers' academic and professional training, teaching experience and mode(s) of communication used in the classroom.

Data from documentary analyses and classroom observations did show some relationship between those variables and language learning. Below are findings demonstrating the influence of teacher factors on language learning. These findings are tempered with the fact that there were other extraneous variables that could account for the status quo. The researcher observed the pre-school children performing different language tasks that required oral responses, signing or using manipulatives.

*Table 4.3: Performance on Assigned Tasks*

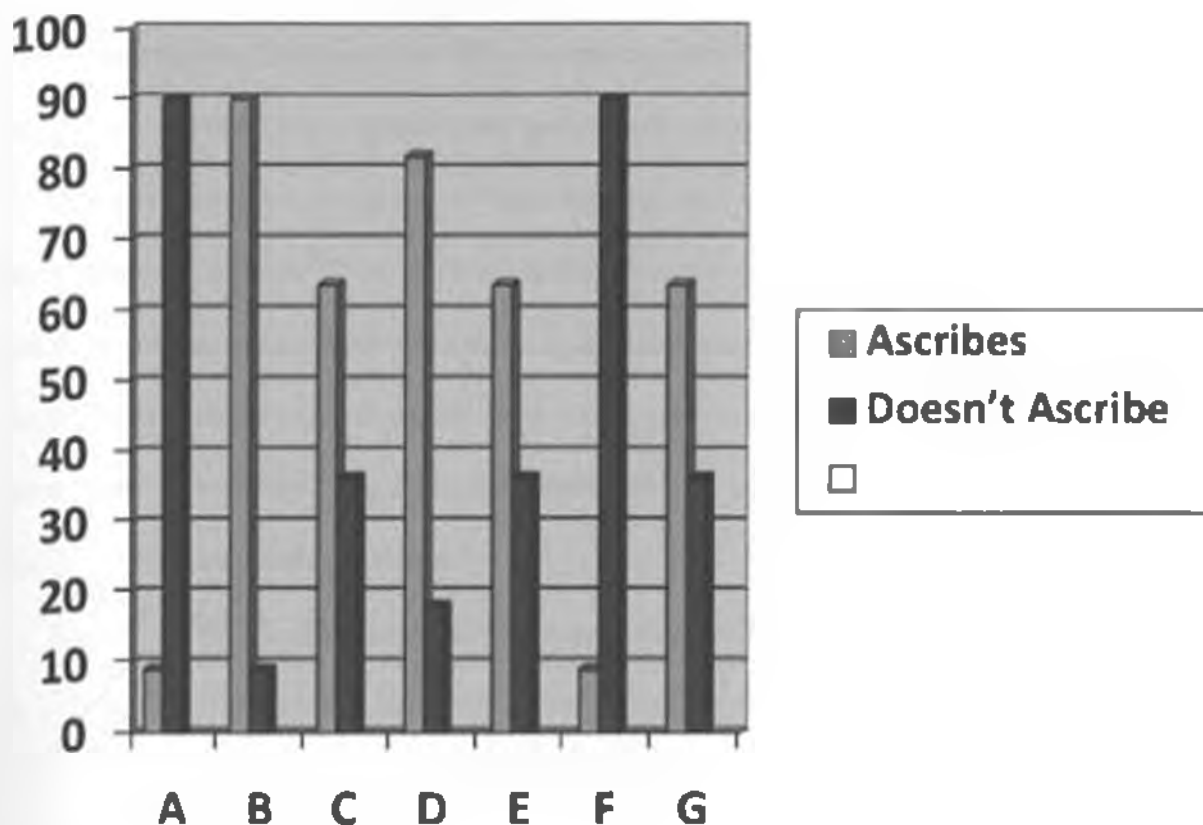
Indicators	Fair	Good	Very good
Oral theory	√		
Signing	√		
Practical		√	

The pre-school children's performance in tasks that required oral responses and signing were fairly well done. However, those that required the children to manipulate different objects were well done. It was apparent on several occasions that tasks that had a practical component and those that required less verbal communication were the most well accomplished. It appears that children preferred practical work including miming, pretend-games and dramatization. Arguably, these are activities that minimize their hearing impairment.

Further investigation into the above fact revealed similar findings. Specifically, the researcher looked into the following: Children's speech, gesture, attention levels, play, level of understanding, level of listening, turn-taking and imitation with a view to making comprehensive, holistic and detailed assessment of pre-school children's performance in language learning.

**Table 4.4: Language Learning Performance Levels**

	Yes ( ) How many	%	No ( ) How many	%	Total
<p>Can you sound words with meaning and some recognizable words?</p> <p>Can you use single words and sometimes put two words together?</p> <p>Can you put words together to make sentences?</p> <p>Can you understand by strangers? If "No" describe</p>	1	9.09	10	90.91	100
<p>Can you use gestures with a situation e.g. wave or bye bye, clap "thank you"?</p> <p>Can you use gestures to get other people to do things for her e.g. Point to cup to get a drink?</p> <p>Can you use gestures to get her message across?</p> <p>Can you point to objects or people that she is interested in?</p> <p>Can you smile, frown, laugh?</p> <p>Can you look at and towards objects?</p>	10	90.91	1	9.09	100
<p>Can you look at the teacher when she speaks?</p> <p>Can you look at new sounds of things?</p> <p>Can you stand to simple tasks and not be distracted by new words or things?</p> <p>Can you stand for longer periods in more difficult tasks e.g. building blocks, drawing?</p> <p>Can you listen and work to people while he doing a task?</p>	7	63.64	4	36.36	100
<p>Can you respond to people and objects?</p> <p>Can you make eye contact?</p> <p>Can you explore / play with objects?</p> <p>Can you like simple pretend play e.g. putting spoon in cup, pretending to feed</p> <p>Can you build with blocks? Does child copy simple domestic activities?</p> <p>Can you play simple games with rules?</p> <p>Can you play pretend games with other children?</p>	9	81.82	2	18.18	100
<p>Can you understand how basic needs will be met e.g. crying if hungry or wet?</p> <p>Can you understand simple instructions when gestures are used?</p> <p>Can you follow instruction when gestures are not used e.g. shows parts of her</p> <p>Can you understand simple language like other children of her age?</p> <p>Can you follow and take part in conversations?</p>	7	63.64	4	36.36	100
<p>Can you respond to sound and look at where it is coming from?</p> <p>Can you recognize differences in sounds and their meanings e.g. dog barking,</p> <p>Can you listen when the teacher speaks to her?</p> <p>Can you listen more carefully to speech?</p> <p>Can you try to imitate words?</p> <p>Can you ignore what child ignores background noise and listen to the teacher?</p>	1	9.09	9	90.91	100
<p>Can you follow and imitate</p> <p>Can you play simple matching rounds with the teacher e.g. if the teacher copies animals will she repeat them?</p> <p>Can you suggest her own sounds in a playful way?</p> <p>Can you imitate adult's actions and sounds?</p> <p>Can you suggest what to take turns in her games?</p> <p>Can you copy words she hears?</p> <p>Can you use words in a communication?</p>	7	63.64	4	36.36	100



From the graph above it is indicative that the pre-school children with hearing impairment did take part in many language learning activities but at varying levels of proficiency – consistent with their type of impairment. In speech, one child could use single words and sometimes put two words together. The other 10 children could not do so because they were all deaf. They instead, used meaningful sounds. The ten could not recognize words. Understandably, they lacked hearing residue. Their development of speech had been impaired.

In terms of using gestures, the ten children were able to link gestures with their referents and situations. For example, they were able to wave bye bye to me and their teacher. They used



gestures to get the teacher to do things for them. For example, pointed to crayons when they wanted to colour. Many times they were able to get their messages across and to point to people they were interested in. They displayed different emotions by, for instance, smiling, laughing and frowning. Only one child was not able to use gestures effectively.

Seven of the eleven pre-school children appeared alert on many occasions the researcher observed language lessons. Their attention spans appeared quite good. This is because they looked at the teacher when she spoke to them. In addition, they attended to simple tasks and did not get easily distracted by sounds around them. However, four children appeared to have shorter attention spans. When they were attempting more difficult tasks such as building bricks and pretend-play they were easily distracted.

Nine of the eleven pre-school children played very well with objects. They were able to build with bricks, copy simple domestic activities, enter games with rules and play-pretend games with other children. Only two children (18.18%) could not accomplish those tasks.

Seven children seemed to have a pretty solid understanding of their needs and would get other people's attention by crying. They also understood simple instructions when gestures were used. Four children seemed to have trouble simple instructions.

Consistent with their type of impairment, ten children were not able to recognize differences in sounds, for instance, a bus arriving. They neither responded to sounds nor looked where the sounds came from. Only the partially deaf child listened to the teacher speaking and was able to recognize differences in sounds.

Seven children seemed adept at turn-taking and imitation. They imitated adult actions and allowed adults to take turn in their games. Five children were not able to engage in turn-taking and imitation effectively.

From the findings above, pre-school children of Kuja School for the Deaf seem to be doing fairly well in language learning. This is because the components investigated are critical pre-requisites upon which other advanced language learning can be anchored.

#### 4.6 SUMMARY

This chapter has presented and discussed key findings of the research work carried out at Kuja School for the deaf. Using inductive analysis and on communication factors affecting language learning among pre-schoolers with hearing impairment, the researcher was able to find out that the pre-school children's challenges in language learning are due to inadequate training of the teacher on effective and efficient ways of handling children with hearing impairment.

The teacher showed preference for using total communication. Pre-school children preferred to use KSL. There appeared to be a mismatch between teacher and pupils' use of sign language hence the teacher and pre-schoolers find it hard to give and/or interpret instructions.

For the pre-schoolers it is also rather difficult as it is tiresome following a teacher's conversation that is not an expert in using total communication (Wilcox 1989). Different signs being used by the hearing impaired pre-schoolers to imply one thing, makes communication difficult. A mixture of all these sign languages distorts information, ending up with misunderstanding or misinterpretations of instructions.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.0. INTRODUCTION**

This chapter presents a summary of findings, conclusion, and recommendations from the study. The first section, gives a summary of the whole study on communication factors affecting language learning among hearing impaired pre-schoolers in Kuja School for the Deaf in Rongo district in Migori county. The second section has the conclusion of the research study, while the final section provides the recommendations from the study and suggestions for further research.

#### **5.1. SUMMARY OF THE FINDINGS OF THE STUDY**

The purpose of the study was to establish communication factors affecting language learning among pre-schoolers with hearing impairment at Kuja School for the Deaf in Rongo District Migori County. The objectives of the study were to find out how the communication mode(s) used by teachers affect the academic performance of pre-schoolers in Kuja School for the Deaf. The study also identified communication barriers between teachers and pre-schoolers in Kuja School for the Deaf. The researcher purposively selected Kuja School for the Deaf as it catered for pre-schoolers with hearing impairment. The sample of the study was the pre-school class with a target population of 11 pre-schoolers (6 boys, 5 girls) the pre-unit teacher and the head teacher of Kuja School for the Deaf.

The instruments used to collect data were questionnaires for the pre-unit teacher and the head-teacher, an observation schedule which was used to observe twenty-five language lessons and also documentary analysis checklist which was used to analyze archival data including childrens' progress records. Both the questionnaires had open-ended and closed-ended questions.

while the observation schedule had seven components scales, thus speech gesture, attention, play, understanding, listening turn taking and imitation.

The data were analyzed using inductive data analysis approaches. Findings were reported in percentages and graphs, whenever applicable. Findings indicate that 10 pupils had acquired deafness before oral language abilities had developed. Only one child had post lingual deafness at age of 2 years due to ear disease infection.

Research findings at Kuja School for the Deaf, has shown that the pre-unit teacher had not trained in special needs education in the area of hearing-impairment. However, she had acquired the basics of teaching children with hearing impairment by listening and watching the children as they interacted with her. According to Borstein (1990), the best way to learn the language of the hearing impaired and have mastery of that language is through interaction with them. A rich language environment should nurture interest of learning sign language. Since KSL is the mother tongue of the hearing impaired in Kenya, the teacher has to master it before learning any other mode of communication.

### **5.3. RECOMMENDATIONS OF THE STUDY**

Based on study findings, the researcher makes the following recommendations:

5.3.1. Trained teachers in the area of the hearing impaired should be assigned to the pre-unit class to facilitate language learning. Conversely, pre-unit teachers handling pupils with hearing impairment should be given priority in attending courses on how to handle children with hearing impairment to fill up the job-skill gap on handling such children. Well designed courses can update their communication skills and equip them with appropriate mode(s) of communication to use during language learning activities.

5.3.2. Special subjects should be taught to help the hearing impaired pre-schoolers learn to utilize their communication abilities to the fullest extent possible. For instance, they can be taught to lip read. Those with residual hearing can benefit from auditory training.

5.3.3. KSL should be taught as mother tongue for deaf children at pre-school levels to provide a building block for later language learning.

5.3.4. Tertiary and primary teacher training colleges should incorporate special education components in their curriculum, so that every teacher is at least made aware of the basic needs of children with special needs.

5.3.5. Staff development should be more diversified in all areas of hearing impaired education. Teachers should be acquainted in special subjects so that they can be able to handle all categories of pre-schoolers with hearing impairment.

5.3.6. Pre-schoolers who benefit from hearing aids should be encouraged to use them to benefit during teaching and learning activities.

#### **5.4 SUGGESTIONS FOR FURTHER RESEARCH**

Based on study findings, the researcher suggests the following areas for further research:

5.4.1. The present study employed a case-study research design that covered only one school.

Further research of similar nature could be conducted but with a larger sample size.

5.4.2. Kenya education system to further research on the kind of syllabus that best suits various categories of disabilities with their unique needs.

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## APPENDIX I

### QUESTIONNAIRE FOR THE HEADTEACHER

This questionnaire is meant purely for academic research. Respond to all questions as honestly and accurately as possible. Do not write your name.

#### SECTION A: BACKGROUND INFORMATION

Use a tick (✓) to fill in responses

##### 1. Age of the headteacher

- a. Below 30 years ( )
- b. 31-40 years ( )
- c. 41-50 years ( )
- d. Over 50 years ( )

##### 2. Duration as the headteacher in this special institution

- a. Below 1 year ( )
- b. 2-5 years ( )
- c. 6-10 years ( )
- d. Over 10 years ( )

##### 3. Professional qualifications

- a. Diploma in Education ( )
- b. Diploma in Special Education ( )
- c. Bachelor of Education (ECD) ( )
- d. Bachelor of Education (Sp. Ed) ( )
- e. Master of Education (Sp. Ed) ( )
- f. Any other (specify) -----

##### 4. Are you specially trained for the hearing-impaired?

- Yes ( ) No ( )

**SECTION B: SCHOOL'S BACKGROUND**

5. What is the pupils' population?

- a. 50-100 ( )
- b. 100-150 ( )
- c. 150-200 ( )
- d. Over 200 ( )

6. How many teachers do you have on your teaching staff?

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7. How many teachers are trained for the hearing-impaired?

---

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**SECTION C: COMMUNICATION APPROACHES AND PROBLEMS**

8. Which mode of communication do you use in communicating with the hearing-impaired pre-schooler? \_\_\_\_\_

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9. Is the mode effective when used to all pre-schoolers?

Yes ( ) No ( )

Give reasons \_\_\_\_\_

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10. Are there teachers on your staff who have difficulties in teaching deaf and hard of hearing?

Yes ( ) No ( )

If yes, what steps have you taken to alleviate the problem? \_\_\_\_\_

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11. Which of this method is commonly used and why?

- a. Total communication ( )
- b. Oral communication ( )
- c. Kenya sign language ( )
- d. Signing exact English ( )
- e. Cued speech ( )

12. What effects does communication problems have in the pre-schoolers learning performance?

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13. What steps are you taking to ensure that all members of the teaching fraternity acquire the knowledge of sign language?

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14. Does your institution lack trained teachers for hearing-impaired?

Yes ( ) No ( )

If yes, what communication difficulties do you get as a result of this shortage?

---

---

15. What recommendations as concerns the improvement of teaching strategies do you have for the hearing-impaired pre-schoolers, that you would like to look into in future?

---

---

*Thank you for your cooperation*

## APPENDIX II

### QUESTIONNAIRE FOR TEACHERS

Please tick (✓) in the appropriate bracket or fill in the blank space.

Respond to all questions as honestly and accurately as possible. This will be treated with confidentiality. Do not write your name.

#### SECTION A: BACKGROUND INFORMATION

##### Pre—school class level

Baby class ( )

Nursery class ( )

Pre—unit ( )

1. Year when the school was established \_\_\_\_\_

##### 2. Age

(a) Below 30 years ( )

(b) 31-40 years ( )

(c) 41-50 years ( )

(d) over 50 years ( )

##### 3. Sex.

Male ( ) Female ( )

##### 4. Professional qualification

(a) Certificate in ECD ( )

(b) Certificate in special education ( )

(c) Diploma in ECD ( )

(d) Diploma in special education ( )

(e) B ED in ECE ( )

(f) B ED in special education ( )

(h) Any other (specify) \_\_\_\_\_

5. For how long have you been teaching the hearing — impaired pre-schoolers

1-5 ( )      6-10 ( )      11-15 ( )

**SECTION B: COMMUNICATION MODES AND PROBLEMS**

6. For effective teaching of hearing impaired pre-schoolers, what mode (s) of communication do you use?

Verbal ( )    non verbal ( )    verbal & non verbal ( )

7. What group of hearing impaired pre-schoolers do you find difficult to communicate with?

Baby class ( )      nursery ( )      pre-unit ( )

Give your reasons \_\_\_\_\_

8. Which category of the following pre-schoolers is easier to communicate with?

Totally deaf, yes ( )      No ( )

Partially deaf, yes ( )    No ( )

9. (A) Do you understand the deaf pre-schoolers responses during teaching activities

Yes ( )      No ( )

if No, give reasons \_\_\_\_\_

\_\_\_\_\_

(B) How can you improve on this lack of understanding?

10. Do the hearing - impaired pre-schoolers understand instructions when you are teaching

Yes ( )    No ( )

If No, give reasons \_\_\_\_\_

\_\_\_\_\_

11 (a) Do your deaf pre-schoolers wear hearing aids?

Yes ( )    No ( )

if No, give reasons \_\_\_\_\_

(b) If Yes, how do you rate the usefulness of the hearing aid

Very useful ( ) moderately useful ( ) Not useful ( )

12. What communication problems do you encounter when teaching the hearing impaired pre-schoolers in the following activity areas?

I. Language \_\_\_\_\_

What suggestions can you offer for overcoming these short comings? \_\_\_\_\_

13 What is the academic performance of the hearing -impaired preschoolers in the following

(i) Oral \_\_\_\_\_

(ii) Theory \_\_\_\_\_

(iii) Practical \_\_\_\_\_

14. a Which mode of communication do you use in communicating with the hearing impaired pre-schoolers? \_\_\_\_\_

b Is the method you use applicable to normal and hearing impaired pre-schoolers?

Yes ( ) No ( )

Give reasons \_\_\_\_\_

15 Which of this methods of communication is commonly used with the hearing impaired pre-schoolers and why?

(a) Total communication ( )

(b) Oral communication ( )

(c) Kenya sign language ( )

(d) Signing exact English ( )

(e) Cued speech ( )

16. What recommendations can you give to improve effective teaching and learning activities to the hearing impaired pre-schoolers

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---

*Thanks for your co-operation.*

**APPENDIX III  
OBSERVATION SCHEDULE.**

**CLASS LEVEL PRE-UNIT**

<b>Speech</b>	<b>Yes ( ) How many</b>	<b>No ( ) How many</b>
Does child use sounds with meaning and some recognizable word.		
Does child use single words and sometimes put two words together.		
Does child put words together to make sentences? Is he understood by strangers if "No" describe.		
<b>Gesture</b>	<b>Yes ( ) How many</b>	<b>No ( ) How many</b>
Does child link gestures with a situation e.g. waves bye bye, claps "thank you"?		
Does child use gesture to get other people to do things for her e.g. points to cup which she wants a drink.		
Does child use gesture to get her message across?		
Does child point to objects or people that she is interested in.		
Does child smile, frown, laugh? Does child reach hand out towards objects?		
<b>Attention</b>	<b>Yes ( ) How many</b>	<b>No ( ) How many</b>
Does child look at the teacher when she speaks.		
Does child look at new sounds of things.		
Can child attend to simple tasks and not be distracted by new sounds or things		
Does child attend for longer periods to more difficult tasks e.g. building bricks, pretend play?		
Can child listen and speak to people while is doing a task.		
<b>Play</b>	<b>Yes ( ) How many</b>	<b>No ( ) How many</b>
Is child interested in people and objects? Will she make eye contact?		
Does child explore / play with objects.		
Does child like simple pretend play e.g. putting spoon in cup, pretending to feed herself?		
Does child build with bricks? Does child copy simple domestic activities?		
Does child entry games with rules?		
Does child play pretend games with other children?		



Understanding	Yes ( ) How many	No ( ) How many
Does child understand how basic needs will be met e.g. crying if hungry or wet?		
Does child understand simple instructions when gestures are used?		
Does child follow instruction when gestures are not use e.g. shows parts of her body?		
Does child understand simple language like other children of her age?		
Can child follow and take part in conversations?		

Listening	Yes ( ) How many	No ( ) How many
Does child respond to sound and look to where it is coming from?		
Does child recognize differences in sounds and their meanings e.g. dog barking, bus arriving.		
Does child listen when the teacher speaks to her?		
Does child listen more carefully to speech? Does she try to imitate words?		
In a noisy place can child ignore background noise and listen to the teacher.		

Turn taking and imitation	Yes ( ) How many	No ( ) How many
Does child take turns in making rounds with the teacher i.e. if the teacher copies child's sounds will she repeat them?		
Does child repeat her own sounds in a playful way?		
Does child imitate adults actions and sounds? Does she want adult to take turns in her games?		
Does child try to copy words she hears.		
Can child take turns in a communication?		

**APPENDIX IV**  
**DOCUMENTARY ANALYSIS**

Specific item	Satisfied	Not satisfactory	If unsatisfactory describe the problem	Identify the specific item accordingly with a description
Schemes of work on language activities				
Lesson plans on language activities				
Progress record on how child fairs on in language activities				
Report book				
Children's work				
Resources learning				

## APPENDIX V

### TIME FRAMEWORK

ACTION	DURATION
Writing of draft proposal	January - March 2011
Literature Review	January - February 2011
Methodology	1 <sup>st</sup> - 2 <sup>nd</sup> week of March 2011
Development of research instrument	3 <sup>rd</sup> - 4 <sup>th</sup> week of March 2011
Submission of Draft proposal	April -May 2011
Data collection	2 <sup>nd</sup> week of Sep to 1 <sup>st</sup> week of Oct 2011
Data Analysis	1 <sup>st</sup> wk of Oct. 2011
Draft Report Writing	2 <sup>nd</sup> wk of Oct 2011
Final copy research project report	3 <sup>rd</sup> - 4 <sup>th</sup> week of Oct
Submission of research project report	1 <sup>st</sup> week of November 2011

## APPENDIX VI

BUDGET PLAN	KSH
Transport and accommodation	5,000/-
Purchase of flush disc	1,200/=
Photocopying services	5000/-
Stationary	3000/=
Binding	2,500/-
Computer charges	1,500/-
Miscellaneous	4000/-
<b>TOTAL.</b>	<b>21200/-</b>

## APPENDIX VII

### A LETTER OF PERMISSION FOR DATA COLLECTION

Elkanah Mochache Gichana  
P.O. Box 30197 – 00100  
Nairobi University  
Nairobi.

Date: \_\_\_\_\_

The Headteacher  
Kuja School for the Deaf  
P.O. Box 245 – 40404  
Rongo

Dear Sir,

#### RE: PERMISSION FOR DATA COLLECTION

I am a post graduate student at the University of Nairobi and pursuing master of education degree (ECE)

I kindly request you to grant me permission to collect data for my project on "communication factors affecting language learning among hearing impaired pre-schoolers in Kuja school for the deaf in Rongo District Migori County. I have chosen your institution for my research study and I intend to collect the data to assist me in finding out communication problems being experienced by both teachers and pre-schoolers during language learning process, and also find out the best mode of communication to assist in the smooth flow of communication. The gathering of data is purely on academic research and the information will be treated with confidentiality.

Attached is a letter of authorization from the ministry of education, allowing me to collect data from your institution.

Looking forward to your assistance and consultation with your teachers and pre-schoolers.

Yours faithfully,

Elkanah Mochache Gichana  
E57/61314/10

## APPENDIX VIII

### LETTER OF TRANSMITTAL

Name : Elkanah Mochache Gichana

University of Nairobi

Faculty of Education

P.O. Box 174

Isebania.

Mobile Line: 0700 263 835

**RE: COMMUNICATION FACTORS AFFECTING LANGUAGE LEARNING AMONG HEARING IMPAIRED PRE-SCHOOLERS IN KUJA SCHOOL FOR THE DEAF IN RONGO DISTRICT IN MIGORI COUNTY.**

I am a master of education ECE student at the University of Nairobi. Am here to carry a research on the above topic. It is my humble request that you assist me by filling in the questionnaire correctly and honestly as possible. Be assured that your identity and response will be treated with utmost confidentiality and for this reason, do not write your name on the questionnaire.

I take this opportunity to thank you in advance for your willingness to participate in this important exercise.

Yours faithfully,

Elkanah Mochache Gichana.

APPENDIX IX

MINISTRY OF EDUCATION



REPUBLIC OF KENYA

DISTRICT EDUCATION OFFICE  
RONGO DISTRICT  
P.O. BOX 245-40404  
RONGO

5<sup>th</sup> September, 2011

Telephone 0203508047

Fax 0203508047

When replying

Please quote Ref RON/ED/ADM/6/VOL 1/7

Elkanah Mochache Gichana  
Nairobi University  
P.O. Box 30197-00100  
Nairobi

Dear Sir,

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to conduct research on 'communication factors affecting language learning among hearing impaired pre-schoolers'

This is to inform you that you have been authorized to carry out research in Kuja School for the Deaf for a period ending 7th October, 2011

You are advised to report to the head teacher Kuja School for the Deaf before commencing your research project

It is noted that the research is a requirement in part fulfillment for the award of M Ed degree of Nairobi University.

Yours faithfully,

Grace Auma  
For: District Education Officer  
**RONGO DISTRICT**

181212

... of ... = ...

AA JJ KK LL MM NN

PP QQ RR SS TT UU VV WW

XX YY ZZ

181212

checked  
181212

Thursday

cat

pig

dog

cow

DOMESTIC ANIMALS

donkey

sheep

goat

camel

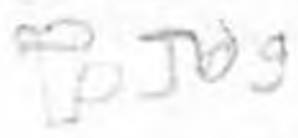
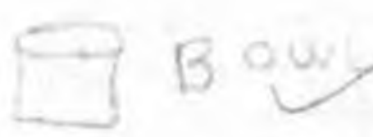
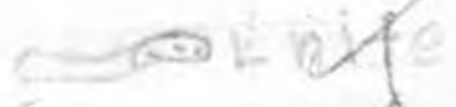
horse

checked  
181212

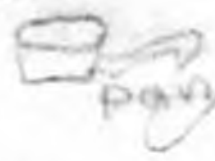


UTENSILS

16/2/21



Change  
16-2-11



**KUJA SPECIAL TERM 2 1<sup>st</sup> CAT 2022**

**MARK LIST CLASS PRE-UNIT**

POS.	NAMES	L/ACT	MATHS	C/ACT	KSL	READ	WRITE	ENV./ACT	TOTAL
1		100	100	99	100	100	99	98	696
2		100	100	99	100	95	99	96	689
3		85	100	95	100	95	85	89	649
4		85	75	97	100	100	98	92	647
5		55	85	95	98	85	90	92	600
6		65	70	88	72	65	98	95	543
7		75	85	65	72	85	85	75	542
7		55	85	90	72	65	90	86	542
9		50	70	60	72	70	50	79	451
10		45	70	96	65	80	75	89	520
11		35	55	60	46	80	35	80	381
	<b>TOTAL</b>	<b>730</b>	<b>895</b>	<b>994</b>	<b>897</b>	<b>820</b>	<b>904</b>	<b>970</b>	
	<b>SUBJECT M.S</b>	<b>66.95</b>	<b>81.36</b>	<b>90.36</b>	<b>81.55</b>	<b>74.54</b>	<b>82.18</b>	<b>88.18</b>	
	<b>SUBJECT POSITION</b>	<b>7</b>	<b>5</b>	<b>1</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>2</b>	

**BY CLASS TEACHER**

**MAM IANET**

# DAILY ACTIVITIES PLAN

7  
2019/2020

Theme: Water  
 Sub-theme: Sources of water  
 Duration: full day  
 Date: 20/9/2011  
 Roll: 9

- Objectives: children will be able to
- 1) Name, write and sign sources of
  - 2) Count and write numbers
  - 3) appreciate water
  - 4) Thank God for water
  - 5) draw and colour

**Content Areas**

- Naming, writing, signing
- Counting, appreciating
- Thinking God, drawing and colouring

**References**

- 1) Activity Book 3
- 2) Guidelines
- 3)

**Materials**

pictures, chart, flash cards, Coloured pencils, crayons, books, pencils

**Introduction:-**

The teacher will introduce the lesson with a song

Thematic activity	0 - 3 Years	3 - 4 Years	4 - 6 Years
English / Language	/	/	Name, write, sign
Mathematics	/	/	Count and write
<b>Break and Snacks</b>			
Outdoor Activity			
Life Skills	/	/	Appreciate water
Reading / C.A.E	/	/	Thank God
Writing			
<b>Break and Snacks</b>			
Creative Activity	/	/	draw and colour
Environmental Activity			
KSL			
MM			

**Conclusion:-** The children will do exercises and put materials back in their respective places.

**Remarks:-** The lesson was not well covered therefore it will be repeated on Thursday 22/9/2011. The lesson was not covered well. More materials are needed to enhance acquisition.

# THIRD TERM WEEKLY ACTIVITIES PLAN

3<sup>rd</sup> Week

Theme: Water

Sub-theme: Sources of water

Duration: 1 week

Roll: 5

Objectives

- 1) Name <sup>5<sup>th</sup></sup> write Sources of Water  
*Math and Po*
- 2) Write alphabet Letters
- 3) Identify letters; colours
- 4) Write number, recognize, do simple addition  
*identifying shapes*
- 5) Appreciate water: sign a sign  
*draw colour sources of water*

Content Areas

- Naming, Writing, Identifying  
adding, appreciating, Signing  
Signing, drawing, colour  
Thanking God, Signing  
pairing and matching

Reference

1. Activity Book 3.
2. Sunshine
3. Primary Science book 1

Materials

- chart, crayons, pens, chalk  
boards, flash cards, compass

Activity	Mon	Tue	Wed	Thur
English Language				
Mathematics				
Out/door				
Life Skills				
Reading				
Writing				
C/A EN/Ad S/Lang				
Mm				

Friday

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Comments: children reported late Materials for this sub-theme

TERM TWO

II

FROM

3<sup>RD</sup> MAY TO

NAME	BORG	CLASS NO.	WEEK 1						TOTAL	WEEK 2						TOTAL	WEEK 3								
			M	T	W	T	F	M		T	W	T	F	M	T		W	T	F						
			1	2	3	4	5	6		7	8	9	10	11	12		13	14	15	16	17	18	19	20	
					X	X	X	6	X	X	X	X	X	10	X	X	X	X	X	10	X	X	X	X	X
											X	X	X	4	X	X	X	X	X	4	X	X	X	X	X
						X	X	4	X	X	X	X	X	10	X	X	X	X	X	10	X	X	X	X	X
					X	X	4	X	X	X	X	X	10	X	X	X	X	X	10	X	X	X	X	X	
									X	X	X	X	8	X	X	X	X	X	8	X	X	X	X	X	
									X	X	X	X	8	X	X	X	X	X	8	X	X	X	X	X	
					X	X	X	6	X	X	X	X	10	X	X	X	X	X	10	X	X	X	X	X	
									X	X	X	X	10	X	X	X	X	X	10	X	X	X	X	X	
									X	X	X	X	10	X	X	X	X	X	10	X	X	X	X	X	

HOLIDAY

HOLIDAY

HOLIDAY